

Lafayette Consolidated Government
AI 20125

b. Vector Attraction Reduction

| VECTOR ATTRACTION REDUCTION | |
|---|--|
| NAME OF FACILITY | PROCEDURE |
| South Wastewater Treatment Plant | Specific Oxygen Uptake Rate (SOUR Test) – The Specific Oxygen Uptake Rate of the sewage sludge shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20° C (68° F). |
| Northeast Wastewater Treatment Plant | Alkaline Treatment - The pH of the sewage sludge shall be raised to 12 or higher by a one-time alkali addition and will remain at 12 or higher for an additional two hours without further alkali addition. The pH of the sewage sludge shall remain at 11.5 or higher for an additional 22 hours. |
| East Wastewater Treatment Plant | Volatile Solids Reduction – The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38%. When the 38 percent volatile solids reduction cannot be met for an anaerobically digested sewage sludge, vector attraction reduction can be demonstrated by digesting a portion of the previously digested sewage sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30° C (86° F) and 37° C (98.6° F). When, at the end of the 40 days, the volatile solids in the sewage sludge at the beginning of that period is reduced by less than 17 percent, vector attraction reduction is achieved. |
| Ambassador Caffery Wastewater Treatment Plant | |

G. Monitoring and Sampling & Analysis:

All samples and measurements taken for the purpose of laboratory analysis shall be representative of the monitored activity and shall be in accordance with the methods referenced in LAC 33:IX.7301.I.

a. Monitoring

a. Monitoring of the Lafayette Consolidated Government preparation/treatment processes shall be performed as indicated in the Table below:

Lafayette Consolidated Government
AI 20125

| GENERATION/PREPARATION/TREATMENT FACILITY | | |
|---|-------------------------|--|
| Outfall | Name of Facility | Monitoring Requirement |
| 201 | South WWTP | <p>1. Daily Dissolved Oxygen Concentration</p> <p>2. Mean Cell Residence Time of the sewage sludge in the aerobic digester</p> <p>3. Daily logs showing that the proper Temperature was maintained for a sufficient period of time in the aerobic digester (continuous charts or two readings per day, at least one per shift)</p> <p>NOTE: Values for Mean Cell Residence Time and Temperature shall be between 40 days at 20°C (68°F) and 60 days at 15°C (59°F).</p> |
| 202 | Ambassador Caffery WWTP | 1. Mean Cell Residence Time and of the sewage sludge in the anaerobic digester |
| 203 | East WWTP | <p>2. Daily logs showing that the Temperature was maintained for a sufficient period of time (continuous charts or two readings per day, at least one per shift)</p> <p>NOTE: Values for Mean Cell Residence Time and Temperature shall be between 15 days at 35°C (95°F) to 55°C (131°F) and 60 days at 20°C (68°F).</p> |
| 204 | Northeast WWTP | <p>1. The pH value of the sewage sludge immediately after the addition of alkali material.</p> <p>2. Thereafter, without the further addition of alkali material, the pH value of the sewage sludge as per one of the following:</p> <p style="padding-left: 40px;">a. on a continuous basis up to and including 23 hours after the addition of alkali material; or,</p> <p style="padding-left: 40px;">b. at 2 and 23 hours after the addition of the alkali material</p> |

The information obtained for the monitoring requirements in the Table above shall be:

1. retained for the life of the permit,
2. kept at the facility in a secure, dry, and easily accessed location; and,
3. readily available to the administrative authority or DEQ personnel upon request.

Lafayette Consolidated Government
AI 20125

b. Sampling & Analysis

The permittee shall sample and analyze representative samples of the untreated sewage sludge and of any material, except Agricultural Grade Lime, that is to be added, blended, or mixed with the sewage sludge during the preparation of the Class B Biosolids from each generation/preparation/treatment facility listed in Part I of the permit for the parameters listed and at the frequency indicated in the Table below.

| Raw Sewage Sludge and Materials ^{1/} Added, Blended, or Mixed with the Sewage Sludge (Hazardous Characteristics Testing) | |
|---|--------------------|
| Parameter | Sampling Frequency |
| <u>TCLP</u> Metals (As, Ba, Cd, Cr, Pb, Se, Ag) Hg Volatile Organics Semi-Volatile Organics Pesticides Herbicides | Once/Year |
| PCB (Total) | Once/Year |

^{1/}Any material, except Agricultural Grade Lime, that is to be added, blended, or mixed with the sewage sludge must be sampled and tested prior to adding, blending, or mixing with the sewage sludge.

The permittee shall sample and analyze representative samples of the Class B Biosolids prepared by the Lafayette Consolidated Government at each of the generator/preparation/treatment facilities listed in Part I of the permit for the parameters listed in and at the frequency indicated in the Table below prior to the land application of the Class B Biosolids:

Lafayette Consolidated Government
AI 20125

| Class B Biosolids | | | |
|---------------------------------|-------------------------|--|-----------------------------|
| Biosolids Sampling Requirements | | | |
| Outfall Number | Facility Name | Parameter(s) | Sampling Frequency |
| All | All | 1. Arsenic 2. Cadmium 3. Copper 4. Lead 5. Mercury 6. Molybdenum 7. Nickel 8. Selenium 9. Zinc | Once/Quarter (4 times/year) |
| 201 | South WWTP | 1. Pathogens 2. Specific Oxygen Uptake Rate 3. Total Solids | |
| 202 | Ambassador Caffery WWTP | 1. Volatile Solids Reduction 2. Total Solids | |
| 203 | East WWTP | | |
| 204 | Northeast WWTP | pH | |

The permittee shall sample and analysis the soils at each of the Lafayette Consolidated Government Land Application sites listed in the permit for the parameters listed in the Table below:

| SOIL SAMPLING REQUIREMENTS | |
|--|---|
| PARAMETERS TO SAMPLE | SAMPLING FREQUENCY |
| 1. Total Kjeldahl nitrogen 2. Total nitrates 3. Total nitrites 4. Total phosphorus 5. Total potassium 6. pH | Once/Year Or If double cropping is practiced, prior to the planting of each crop. |

All samples and measurements taken for the purpose of laboratory analysis shall be representative of the monitored activity and shall be in accordance with the methods referenced in LAC 33:IX.7301.I.

Lafayette Consolidated Government
AI 20125

H. Recordkeeping and Reporting:

1. Recordkeeping

The laboratory results for the parameters in the **Raw Sewage Sludge and Materials Added, Blended, or Mixed with the Sewage Sludge (Hazardous Characteristics Testing) Table**, the **Biosolids Sampling Requirements Table**, and the **SOIL SAMPLING REQUIREMENTS Table** shall be retained for the life of the permit.

The following information must be recorded for each land application event and the information retained indefinitely:

- The location, by physical address and latitude and longitude, of each site on which the bulk Class B Biosolids is applied.
- The number of acres (or hectares) in each site on which the bulk Class B Biosolids is applied.
- The date the bulk Class B Biosolids is applied.
- The amount of bulk Class B Biosolids that is applied at each site on each day of application.

The permittee shall create and maintain records of monitoring and sampling and analysis information that shall include:

- the date, exact place, and time of sampling or measurements;
- the individual(s) who performed the sampling or measurements;
- the date(s) analyses were performed;
- the individual(s) who performed the analysis;
- the analytical techniques or methods used; and,
- the results of such analysis.

2. Reporting

The permittee shall submit reports to the administrative authority as indicated below:

The annual amount of sewage sludge generated at the facility shall be reported on February 28th of each year.

The annual amount of sewage sludge that is prepared into a Class B Biosolids shall be reported on February 28th of each year.

The annual amount of Class B Biosolids that is land applied shall be reported on February 28th of each year.

Lafayette Consolidated Government
AI 20125

For the parameters listed in the **Raw Sewage Sludge and Materials Added, Blended, or Mixed with the Sewage Sludge (Hazardous Characteristics Testing)** Table and **SOIL SAMPLING REQUIREMENTS** Table, the reporting shall be once per year on or before February 28th.

For the parameters listed in the **Biosolids Sampling Requirements**, the reporting due date is as indicated in the **Reporting—Land Application** Table below:

| Reporting—Land Application | |
|---|-----------------|
| Monitoring Period ¹ (Once per Quarter) | Report Due Date |
| January, February, March | August 28 |
| April, May, June | |
| July, August, September | February 28 |
| October, November, December | |
| ¹ Separate reports must be submitted for each monitoring period. | |

If the permittee monitors any pollutant, in accordance with applicable test procedures specified in this permit, more frequently than required by the permit, then the results of this monitoring shall be reported to the Administrative Authority on the forms specified by the Administrative Authority.

I. Other Pertinent Information:

April 3, 2008: LDEQ – OES received a Sewage Sludge & Biosolids Use or Disposal Permit Application from the Lafayette Consolidated Government.

May 19, 2008: Completed review of the Sewage Sludge & Biosolids Use or Disposal Permit Application submitted by the Lafayette Consolidated Government.

September 24, 2008: The Fact Sheet and other material needed in the Draft Permit Package were completed.

September 24, 2008: The package was routed for review and approval.

Package Prepared By: J. Kilren Vidrine, DCL-A
Water Permits Division

7008 3740 0002 5900 6476

| | |
|--|------------------------------|
| U.S. POSTAL SERVICE | |
| CERTIFIED MAIL RECEIPT | |
| (Domestic Mail Only; No Insurance Coverage Provided) | |
| For delivery information visit our website at www.usps.com | |
| OFFICIAL USE | |
| Mr. Craig Gautreaux, Wastewater Operations Mana | |
| Lafayette Consolidated Government | |
| Lafayette Consolidated Government Biosolids Mana | |
| P.O. Box 4017-C | |
| Lafayette, LA 70502 | |
| Sent To | |
| Street, Apt. No., | |
| or PO Box No. | |
| City, State, ZIP+4 | |
| PS Form 3800, August 2006 | See Reverse for Instructions |